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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,420	09/08/2003	Jose E. Lizardi	022956-0238	9019
21125	7590	09/19/2006	EXAMINER	
NUTTER MCCLENNEN & FISH LLP WORLD TRADE CENTER WEST 155 SEAPORT BOULEVARD BOSTON, MA 02210-2604			MENDOZA, MICHAEL G	
			ART UNIT	PAPER NUMBER
			3734	

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/657,420	LIZARDI, JOSE E.
	Examiner	Art Unit 3734
	Michael G. Mendoza	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. §133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 July 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 70,71 and 73-90 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 86-90 is/are allowed.
- 6) Claim(s) 70,73,75-79 and 81-85 is/are rejected.
- 7) Claim(s) 71, 74, and 80 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 7 July 2006 have been fully considered but they are not persuasive. The applicant argues that Giannuzzi does not teach or suggest a suture anchor system that includes a suture thread-engaging groove. The examiner disagrees. The fastener of Giannuzzi teaches a groove/notch 43 shown in fig. 14, that is fully capable of engaging a suture. The applicant does not positively claim a suture within the groove. The structure 43 of Giannuzzi can engage a suture. While the features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone.
  
2. The applicant argues the Chow does not teach or suggest radially expandable suture anchor. The examiner disagrees. The device of Chow teaches all of the structural limitations. When pin 15 is inserted into bore 14 parts 18a and 16b extend radially outward from the body of the device. One again the applicant does not positively claim a suture. The device of chow is fully capable of engaging a suture. While the features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone. The applicant argues the Chow does not teach a tapering tip. Figs. 1, 3, 4, 6, 8, 10, 11, and 12 show otherwise.

Main Entry: <sup>2</sup>taper

Function: *adjective*

1 : progressively narrowed toward one end

The rounded edges of Chow as shown in the figures reads on the definition of taper. It is well known to taper or round edges for ease of insertion of devices.

***Claim Rejections - 35 USC § 102***

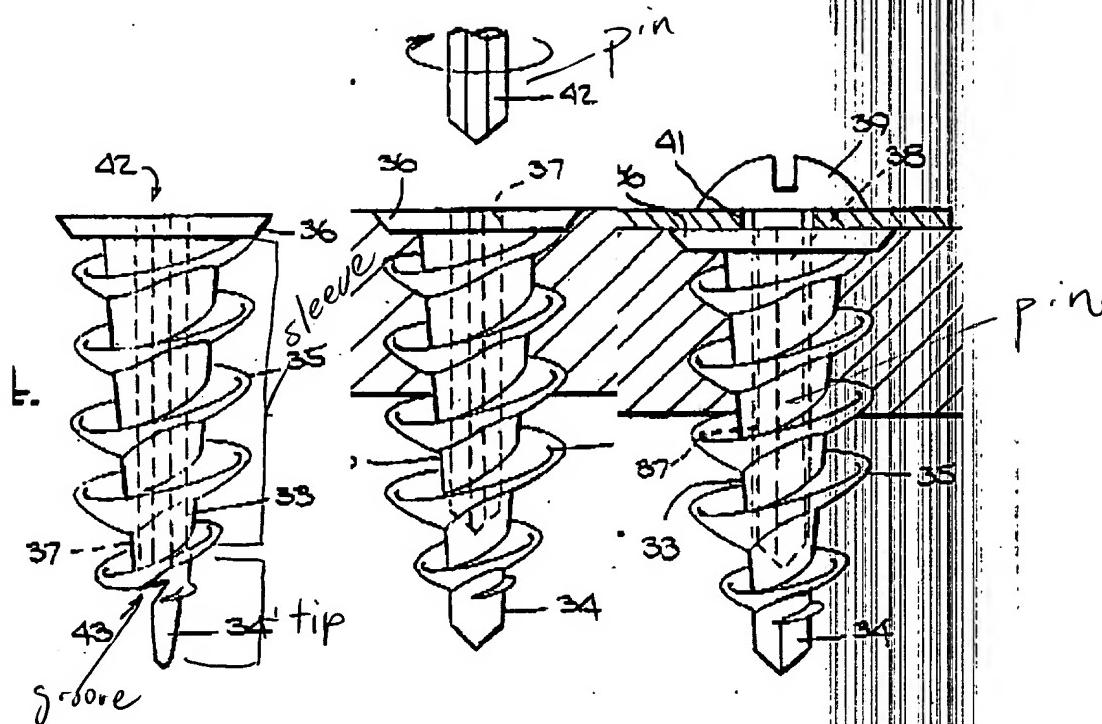
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

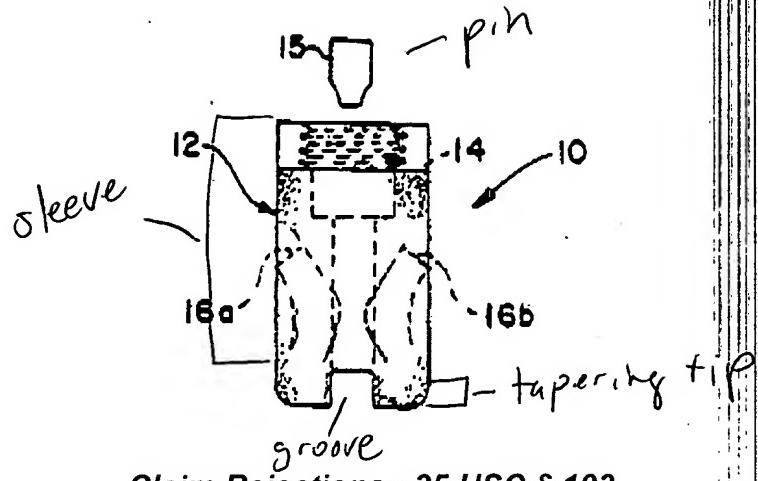
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 70, 73, 75, 76, 78, 79, and 81 are rejected under 35 U.S.C. 102(b) as being anticipated by Giannuzzi 4892429.

5. Giannuzzi teaches a system comprising: a radially expandable anchor including a bore extending longitudinally from a proximal end, a tapered tip at a distal end, the tip having formed therein a groove, wherein the taper of the tip extends a distance at least equal to the length of the groove; a expander pin; wherein the anchor is comprised of an expandable sleeve in engagement with the tip; wherein the anchor includes an external surface feature; wherein the external surface feature is selected from the group consisting of ridges, wedges, and fins; wherein the expander pin includes a surface feature effective to assist in the radial expansion of the sleeve; wherein the anchor further includes a pair of longitudinally extending slits extending form the proximal end thereof (col. 7, lines 31-37); and wherein the expander pin is tapered.



6. Claims 70, 73, 75, 78, and 81 are rejected under 35 U.S.C. 102(b) as being anticipated by Chow 5176682.
7. Chow teaches a system comprising: a radially expandable anchor including a bore extending longitudinally from a proximal end, a tapered tip at a distal end, the tip having formed therein a groove, wherein the taper of the tip extends a distance at least equal to the length of the groove; a expander pin; wherein the anchor is comprised of an expandable sleeve in engagement with the tip; wherein the anchor includes an external surface feature; wherein the expander pin includes a surface feature effective to assist in the radial expansion of the sleeve; and wherein the expander pin is tapered.



**Claim Rejections - 35 USC § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 77 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giannuzzi.

10. Giannuzzi teaches the system of claim 70. It should be noted the Giannuzzi fails to teach wherein the expander pin includes a tool-engaging bore. However, it is well known in the art of fasteners that a bore (such as a bore used for engagement for an allen wrench) is an alternate for a slot or a Phillips type engagement for use with a driving tool. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a bore as an obvious alternative to the slot used by Giannuzzi.

11. Claims 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chow as evidenced by US Patents 5814071, 5964783, 6527794, 6660023, 6726707.

Chow teaches the system of claim 70. It should be noted that Chow fails to specifically teach that the suture anchor and the expansion pin are made from bioabsorbable material. However, it is well known in the art of sutures anchors to use a bioabsorbable material to avoid further surgery after the heal process (as evidenced by US Patents 5814071, 5964783, 6527794, 6660023, 6726707). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a bioabsorbable material including the materials as limited in claims 83 and 85 to allow the body to absorb the material over time so that removal is not needed after healing.

***Allowable Subject Matter***

12. Claims 71, 74, and 80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claims 86-90 are allowable over the prior art of record.

14. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach or render obvious the overall claimed invention of a suture anchor system, comprising: a radially expandable suture anchor including a bore extending longitudinally from a proximal end, and a tapered suture engaging tip at a distal end the suture engaging tip having formed therein a suture thread-engaging groove, and the suture anchor further includes a through-hole extending therethrough in a direction transverse to a longitudinal axis of the anchor; or wherein the suture anchor further includes a pair of longitudinally extending slits extending from the proximal end thereof, and an expander pin includes a pair of fins

having a complementary shape to the slits of the anchor and being configured to engage the slits and expand the anchor.

***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Mendoza whose telephone number is (571) 272-4698. The examiner can normally be reached on Mon.-Fri. 9:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MICHAEL J. HAYES  
SUPERVISORY PATENT EXAMINER

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